

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/2009 has been entered.

Response to Amendment

2. The amendment dated 2/17/2009 has been fully considered and entered into the Record. Claim 1 has been amended to now recite "wherein any one of weft and warp yarn of the glass cloth is oriented at an angle of greater than 0 degrees and less than or equal to 5 degrees relative to an absorption axis of the polarizing plate". Examiner has withdrawn his previous rejection based upon the combination of Ito and Sadao, because his previous position was that it would have been obvious to one of ordinary skill in the art to have oriented the woven glass fabric in the claimed manner as aligning the fibers along with the absorption axis (zero degrees relative to axis) would avoid the introduction of a third axis into the LCD, which might distort the image. This interpretation of the prior art does not render the newly amended claims obvious.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (WO 03/081322 A2) in view of Sadao (JP 11-002812). Examiner has relied upon the translation of this JP reference provided by Applicant for the basis of this rejection.

- a. Ito discloses a polarizing plate which includes a polymer film, a polarizer, a polymer substrate and an optically anisotropic layer containing liquid crystal (abstract). The invention of Ito may comprise a second polarizing plate and the plates are placed perpendicular to one another (page 11). Placing a polarizing plate on either side of the liquid crystal cell forms a liquid crystal display (LCD) (page 6). Ito fails to teach or suggest the use of a woven glass fabric in the polymer substrate layer or the use of barrier and hard-coating layers.
- b. Sadao discloses a LCD comprising a layer of glass cloth impregnated with resin (abstract). The glass cloth may be woven [0028]. The LCD may further comprise gas barrier and hard-coating layers [0006-7].
- c. Since Ito and Sadao are from the same field of endeavor (i.e. LCDs), the purpose disclosed by Sadao would have been recognized in the pertinent art of Ito.
- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Ito with woven glass fabric and protective layers of Sadao with the motivation of providing improved protective

properties to the LCD and decreasing the weight of the LCD with inclusion of the reinforcing fabric.

e. The disclosures of Ito and Sadao fail to teach or suggest the orientation of the woven glass fabric of the polymeric substrate layer at an angle of greater than 0 degrees and 5 degrees or less relative to an absorption axis of the polarizing plate.

f. However, it would have been obvious to one of ordinary skill in the art to have oriented the woven glass fabric in alignment with the absorption axis (zero degrees relative to axis) to avoid the introduction of a third axis into the LCD, which might distort the image. While it would be desirable to align all of the fibers in one direction (warp or weft) with the absorption axis, it is reasonable to presume that the aligned fibers would not be perfectly aligned with said absorption axis due to variation or error in the manufacturing process. This variation or error in the manufacturing of the woven glass fabric would lead to fibers to be oriented at an angle of greater than 0 degrees

g. Furthermore, the effect of a value of 0 and infinitesimally greater than zero (which would be within the claimed range) would be so small that the effect realized would be insignificant.

Response to Arguments

4. Applicant's arguments filed 2/17/2009 have been fully considered but they are not persuasive.
5. Applicant argues that the current amendment sufficiently distinguishes the claimed invention over the combination of Ito and Sadao. While the amendment has caused Examiner to withdraw his previous rejection in view of Ito and Sadao, he has reapplied the references with a new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1794

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit
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